Martiak, Nichole E.

From: Cicenia, Christine [Christine.C.Cicenia@Pfizer.com]
Sent: Thursday, October 19, 2006 10:44 AM
To: Martiak, Nichole E.
Subject: FW: A367 Office Action - Due 9/27/06; HB ref: 1321-13 DIV

Good morning, Nichole.

After researching, I have come up with a copy of the English Abstracts for the patents referenced in the IDS. I am sending a PDF file that includes the references. This case was originally handled by outside counsel, so that attachment came from them. (You will note the file says A366, however, I believe the references were almost identical to the A367 case.)

If you have any further questions, please let me know.

Christine Cicenia
Sr. Administrative Assistant
to Darryl C. Little
Telephone: 973-385-3846

From: Little, Darryl
Sent: Tuesday, October 17, 2006 11:05 AM
To: Cicenia, Christine
Subject: RE: A367 Office Action - Due 9/27/06; HB ref: 1321-13 DIV

Christine,

Please provide the info requested to Nichole.

Thanks,
Darryl

From: Martiak, Nichole E. [mailto:Nmartiak@hoffmannbaron.com]
Sent: Tuesday, October 17, 2006 10:01 AM
To: Little, Darryl
Cc: Scola, Daniel
Subject: RE: A367 Office Action - Due 9/27/06; HB ref: 1321-13 DIV

Dear Darryl,

Good morning. I am working with Dan Scola on the response for the Office Action dated 06/27/2006 for the above referenced application (10/766,366). Do you have copies of the foreign references listed on the Information Disclosure Statement as discussed on page 3 of the Office Action? Please let us know so we can retrieve the relevant English abstracts and printed publications to submit in our response, if necessary.

Thanks,

Nichole

Nichole E. Martiak, Esq.

Hoffmann & Baron, LLP
1055 Parsippany Blvd.
Parsippany, NJ 07054
(973) 331-1700 phone
(973) 331-1717 fax

-----Original Message-----
From: Scola, Daniel
Sent: Friday, October 13, 2006 1:20 PM
To: Martiak, Nichole E.
Subject: FW: A367 Office Action - Due 9/27/06

-----Original Message-----
From: Little, Darryl [mailto:Darryl.Little@Pfizer.com]
Sent: Wednesday, September 27, 2006 3:16 PM
To: Scola, Daniel
Cc: Larmann, Jamie M.
Subject: FW: A367 Office Action - Due 9/27/06

Dan/Jamie,

Can you handle the case below...? As well as one more to follow (PC 5855C1).... 3 month statutory period for both have expired. Hoping to have drafts within 1 month extension, but definitely before 3 month extension is necessary.

Let me know. Also please let me know pricing estimate for both cases.

Thanks,
Darryl

From: Cicenia, Christine
Sent: Thursday, September 14, 2006 11:24 AM
To: Little, Darryl
Subject: A367 Office Action - Due 9/27/06

Darryl,

Here is the OA, references cited, and shell for the response. The two JP patents mentioned are attached to the back of the OA from the Examiner.

Christine

<<PC18212 (A367) Office Action 6 27 06.pdf>> <<A367 Refs cited.zip>> <<A0000367 Response 9 06.doc>>

❑ Shellac-based **tooth**-coating compositions containing basic amino acids and pH controllers

L9 ANSWER 1 OF 8 HCA COPYRIGHT 2000 ACS
AN 132:156565 HCA
IN Oka, Hironori
PA Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000044422	A2	20000215	JP 1998-250314	19980731

AB The compns., which prevent **teeth** from caries because of the antibacterial and antiplaque effects and have no stickiness just after curing, contain alc.-sol. shellac, 0.001-30 parts (based on 100 parts 1-80% alc. soln. of shellac) and 0.001-30 parts pH controllers. The compns. may addnl. contain bactericides, e.g. quaternary ammonium salts, chlorhexidine, etc., pharmacol.-active ingredients, e.g. azulene, glycyrrhizinic acid, allantoin, tranexamic acid, propolis, etc., and/or carbohydrates such as sugar alcs. or oligosaccharides. Laccoat EDS (50% EtOH soln. of shellac) 27.0,EtOH 56.0, L-arginine 0.1, **hinokitiol** 2.0, and lavender oil 7.0 g were mixed to give a coating compn. The compn. was applied to a **tooth** by a brush to dry within 3 s to form a nonsticky film.

❑ **Dentifrices** containing acidic polysaccharides and noncationic bactericides

L9 ANSWER 2 OF 8 HCA COPYRIGHT 2000 ACS
AN 131:35676 HCA
IN Iwata, Masaaki; Minemoto, Isao
PA Lion Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11158052	A2	19990615	JP 1997-344469	19971128

AB The **dentifrices** contain polycarboxylic acids derived from polysaccharides comprising anhydroglucose unit or their salts and noncationic bactericides. The polycarboxylic acids inhibit formation of hydroxyapatite crystal, and their combined use with noncationic bactericides effectively inhibit formation of **dental** calculus. An aq. HClO soln. was added dropwise to a mixt. of corn starch, H2O, and RuCl3.nH2O at 20.degree. and pH 9 over 3 h, and the reaction mixt. was further stirred for 2 h to give polycarboxylic acid Na salts. A **dental** paste contg. the polycarboxylic acid Na salts and triclosan was also formulated.

❑ **Tooth** coating composite and its preparation

L9 ANSWER 3 OF 8 HCA COPYRIGHT 2000 ACS
AN 130:227562 HCA
IN Oka, Hironori
PA Japan
SO Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 900560	A1	19990310	EP 1998-117005	19980908
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 11147815	A2	19990602	JP 1997-309268	19971022
	JP 3069540	B2	20000724		
	JP 11240816	A2	19990907	JP 1998-58871	19980223
PRAI	JP 1997-285951	19970909			
	JP 1997-309268	19971022			
	JP 1998-58871	19980223			

AB The composite of the present invention comprising shellac dissolved in alc. and at least one of antibacterial constituent, antibacteria antibody, and efficacious constituent is applied to a **tooth** surface to form an antibacterial film on the **tooth** surface such that it can prevent effectively **dental** caries and periodontal disease and cure periodontal disease. Further, it is possible to apply the composite to a **tooth** without any special tech. skill such that it is quite easy to prevent **dental** caries and periodontal disease without any help of the **dentist**. A compn. was prepd. contg. shellac 27.0, abs. ethanol 56.0, **hinokitiol** 2.0, amyl formate 7.0, and lavender oil 6.0g.

RE.CNT 3
RE
(1) Blendax-Werke R Schneider & Co; DE 1965046 A1 1971 HCA
(2) Jenko, A; AT 172063 B 1952
(3) Kawai, J; JP 04082821 A

❑ Anticalculus **dentifrice** compositions containing phytates and noncationic bactericides

L9 ANSWER 4 OF 8 HCA COPYRIGHT 2000 ACS
AN 129:153031 HCA
IN Iwata, Masaaki; Minemoto, Isao
PA Lion Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10182383	A2	19980707	JP 1996-355758	19961224

AB Title compns. contain phytic acid (I) or its water-sol. salts and noncationic bactericides. Silica 15.0, 60% sorbitol soln. 25.0, Na CM-cellulose 1.0, Na saccharin 0.15, Na lauryl sulfate 1.5, NaOH, I 2.0, triclosan 0.2, and H2O to 100.0 wt.% were mixed to prep. a **toothpaste**, which in vitro inhibited bacteria assocd. with **dental** plaque formation with MIC of <1.0-6.25 ppm. Inhibition of crystal growth of hydroxyapatite by I was also shown.

❑ **Mouthwashes** or other **oral** liquid compositions containing gellan gum and nonionic surfactants to improve stability

L9 ANSWER 5 OF 8 HCA COPYRIGHT 2000 ACS
AN 124:241818 HCA
IN Okumura, Kenji; Saito, Tooru; Ootsuki, Hidehiko
PA Sunstar Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08003074	A2	19960109	JP 1994-138609	19940621

AB **Mouthwashes** or other **oral** liq. compns. contain gellan gum and nonionic surfactants in addn. to other ingredients to improve gellan gum stability and to prolong active ingredient retention time. A **mouthwash** contained tocopherol nicotinate 0.05, gellan gum 0.2, ethoxylated castor oil 0.5, ethanol 5.0, sodium dihydrogen phosphate 0.01, sodium monohydrogen phosphate 0.01, glycerin 13, sodium saccharin 0.01, perfumes 0.3, and water to 100 parts.

❑ Cosmetic compositions in polyethylene or polypropylene containers

L9 ANSWER 6 OF 8 HCA COPYRIGHT 2000 ACS
AN 113:84653 HCA
IN Yamamoto, Mizuya; Tokumitsu, Fumihiko; Sakamoto, Toyoko
PA Lion Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 02069411	A2	19900308	JP 1988-221572	19880905
	JP 2778046	B2	19980723		

AB Cosmetic compns. (e.g. **toothpastes**, face cleansers) contain anionic surfactants and .gtoreq.1 water-insol. active ingredients chosen from tocopherols, .alpha.-bisabolol (I), glycyrrhetinic acids, cholesterols, hydroxamic acids, isopropylmethylphenols, and **hinokitiol** and placed in containers, in which the inner layers are made of high-d. polyethylene, polypropylene, or low-d. polyethylene crosslinked with metals. **Toothpaste** was prepd. from a mixt. consisting of CaHPO4 45, SiO2 2.0, sorbitol soln. 25.0, propylene glycol 3.0, Na CM-cellulose 1.1, Na lauryl sulfate 1.5, sodium saccharin 0.1, Me p-hydroxybenzoate 0.1, fragrances 1.0, I 0.1, and H2O to 100% by wt. and packed in a tube laminated with (from outer layer) polypropylene, Al foil, and polypropylene, and preserved at 50.degree. for 1 mo without change in the I content.

❑ **Dentifrices** containing anionic surfactants, physiologically active ingredients in containers of acrylonitrile copolymer

L9 ANSWER 7 OF 8 HCA COPYRIGHT 2000 ACS
AN 112:204499 HCA
IN Yamamoto, Mizuya; Tokumitsu, Fumihiko; Sakamoto, Toyoko
PA Lion Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 01305021	A2	19891208	JP 1988-136566	19880602

AB **Dentifrices** contain anionic surfactants and .gtoreq.1 non-water-sol. active ingredients chosen from tocopherol and its derivs., .alpha.-bisabolol (I), glycyrrhetic acid and its derivs., cholesterol and its derivs., hydroxamic acid and its derivs., isopropylmethylphenols, and **hinokitiol** and are placed in containers prepd. with polymers of CH2:CR1CN (R1= H, lower alkyl, halo) and CH2:CR2CO2R3 (R2= same as I; R3= alkyl), butadiene and/or isoprene. A **tooth** paste comprising CaHPO4 45, SiO2 2.0, sorbitol soln. 25.0, propylene glycol 3.0, Na CM-cellulose 1.1, Na lauryl sulfate 1.5, Na saccharin 0.1, Me p-hydroxybenzoate 0.1, fragrance 1.0, I 0.1, and H2O to 100% was placed in a container, which was a laminate of, from outside, acrylonitrile copolymer (acrylonitrile-butadiene rubber-acrylonitrile-Me acrylate graft copolymer, contg. .gtoreq.75% acrylonitrile), ethylene-methacrylic acid copolymer, Al foil, ethylene-methacrylic acid copolymer, and the acrylonitrile copolymer. The **tooth** paste was kept at 50.degree. for 1 mo and showed .gtoreq.90% intact I.

❑ Anticaries agents

L9 ANSWER 8 OF 8 HCA COPYRIGHT 2000 ACS
AN 102:31949 HCA
PA Kanebo Foods, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 59175410	A2	19841004	JP 1983-51199	19830326
JP 01040005	B4	19890824		

AB **Dentifrices** that prevent **dental** caries contain natural essential oils, components of these oils, synthetic fragrant compds., carboxylic acids, and/or lactones. Thus, a **dentifrice** comprises cypress oil 20, rosemary oil 40, Origanum oil 20, cinnamon oil 20, geraniol [106-24-1] 40, cyclamen aldehyde [103-95-7] 40, lauric acid [143-07-7] 40, oleic acid [112-80-1] 20, and .delta.-tetradecalactone [2721-22-4] 40 parts. The antimicrobial activity of this prepn. against Streptococcus mutans was demonstrated in vitro.

❑ Disposable **oral** hygiene product comprising waterproof container and porous drug-holding material

L10 ANSWER 1 OF 1 HCA COPYRIGHT 2000 ACS
AN 131:149103 HCA
IN Maruoka, Takao
PA Kanae Kagawa K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 11197217	A2	19990727	JP 1998-18224	19980112

AB The product, which is used by adding H2O to the container to dissolve the drugs for rinsing **mouth** or preventing and treating tonsillitis, mastitis, etc., comprises a waterproof container and a porous drug-holding material, e.g. porous sachet, woven or nonwoven fabric bag, net, punching sheet, etc., which holds drugs and surfactants and/or moisturizers. Colorants may be added to the drugs to indicate the dissoln. state. The drug-holding material keeps storage-stability of the drug and rapidly releases the drug upon contact with water. A PET nonwoven fabric sheet was impregnated with 1 mL compn. contg. povidone-iodine 70, glycerin 50, Tween 80 5 mg, and H2O balance and dried. The sheet and H2O were placed in a paper cup and the cup was moderately swung to dissolve the drug within 30 s.

❑ Aerosol antibacterial cleaning compositions for cleaning **toothbrushes** without toxic residues and cleaning of **toothbrushes** using the compositions

L13 ANSWER 2 OF 38 HCA COPYRIGHT 2000 ACS
AN 131:230313 HCA
IN Toda, Atsuhiro; Nishio, Yoshimitsu; Furukawa, Toshitada; Iijima, Kazuo; Kurihara, Junya
PA Kyowa Kogyo K. K., Japan; Kanehide Jochugiku K. K.
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11256191	A2	19990921	JP 1998-78323	19980310

AB The cleaning compns. essentially contain bactericides. An aq. compn. contg. 90% EtOH 70.0, mushroom ext. 0.5, black tea leave ext. 0.50, peppermint oil 0.02, and antiinflammation agent 0.04% was pressurized with N (g) to give an aerosol compn. exhibiting good properties of cleaning of a **toothbrush** root on cleaning a **toothbrush** with the compn.

❑ Cosmetics, sanitary products, and quasi drugs containing hydrophilic substances of Cupressaceae plants

L13 ANSWER 3 OF 38 HCA COPYRIGHT 2000 ACS
AN 131:174843 HCA
IN Moriyama, Mariko; Ninomiya, Kazuko
PA MTI Y. K., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11228379	A2	19990824	JP 1998-51306	19980218

AB The title health products contain (A) wastewater generated from steam distn. of wood and/or branches and leaves of Cupressaceae plants to ext. essential oils, (B) exts. prepd. by soaking the wood and/or branches and leaves in cold water or hot water, (C) exts. prepd. by shaking essential oils of Cupressaceae plants with H2O, (D) exts. prepd. by soaking the wood and/or branches and leaves in a mixt. of alcs. and H2O, or their concd. products. Hydrophilic compds. contained in the wastewater inhibit tyrosinase and show antibacterial and deodorant effects. An aq. ext. of sawdust of Thujopsis dolabrata hondae inhibited mushroom tyrosinase in a dose-dependent manner. A hair tonic contg. EtOH, Swertia ext., vitamin B6, vitamin E, propylene glycol, Kollidon K, menthol, and the above aq. ext. prevented hair loss and stimulated hair growth.

❑ Branched cyclodextrin clathrate compound of **hinokitiols** for cosmetics

L13 ANSWER 4 OF 38 HCA COPYRIGHT 2000 ACS
AN 131:149098 HCA
IN Ishida, Kenya; Sakurai, Kazutoshi
PA Takasago International Corporation, Japan
SO Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DT **Patent**
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 934954	A1	19990811	EP 1999-400258	19990204
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 11222455	A2	19990817	JP 1998-36562	19980204
PRAI	JP 1998-36562	19980204			

AB **Hinokitiol** having antibacterial activity is added to cosmetics. Clathrate of **hinokitiols** is prepd. by using a branched cyclodextrin such as a branched .beta.-cyclodextrin. The clathrate compd. can be used in hair cosmetics, bathing agents, skin cosmetics, and **oral** compns.
RE.CNT 4
RE
(1) Nikken Chem KK; JP 61197602 A 1986
(2) Seiwa Technological Laboratories Limited; EP 0215169 A 1987
(3) Shiseido Company Limited; EP 0882447 A 1998
(4) Shiseido Company Ltd; US 5447920 A 1995

❑ **Dentifrices** containing carboxybetaine polymers and noncationic bactericides

L13 ANSWER 5 OF 38 HCA COPYRIGHT 2000 ACS
AN 131:78195 HCA
IN Hayashi, Rieko; Akabane, Yasuhiro; Hiratsuka, Susumu
PA Lion Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11158051	A2	19990615	JP 1997-344468	19971128

AB The **dentifrices** contain amphoteric surfactants comprising homopolymers or copolymers of carboxybetaine monomers and noncationic bactericides. The **dentifrices** show high plaque formation-inhibiting activity. An aq. soln. contg. 0.03% Amphoset and 0.03% triclosan showed 68% inhibition against plaque formation by Streptococcus sanguis on an artificial saliva-coated hydroxyapatite plate. A **dental** paste contg. Amphoset and triclosan was also formulated.

❑ **Dentifrices** containing carbonates and **hinokitiol** in weak alkaline conditions

L13 ANSWER 6 OF 38 HCA COPYRIGHT 2000 ACS
AN 131:9474 HCA
IN Kojima, Nobuo
PA Lion Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11130648	A2	19990518	JP 1997-312624	19971029

AB **Dentifrices** for the prevention and treatment of periodontal diseases, comprise water-sol, inorg. carbonates, **hinokitiol**, and .gtoreq. 1 compd. selected from the group consisting of sulfites, bisulfites, and metabisulfites. The compns. do not develop colors during storage. A **toothpaste** contained silicic anhydride 10, CM cellulose 0.8, hydroxyethyl cellulose 0.3, glycerin 40, polyethylene glycol 5, polyoxyethylene behenyl ether 4, benzethonium chloride 0.05, .beta.-cyclodextrin 0.2, **hinokitiol** 0.1, sodium bisulfite 0.1, sodium hydrogen carbonate 20, butylparaben 0.1, flavors 0.1, and water to 100 %.

❑ **Dentifrices** containing antiplasmins and ascorbic acids

L13 ANSWER 7 OF 38 HCA COPYRIGHT 2000 ACS
AN 130:172807 HCA
IN Yamamoto, Mizuya; Uno, Daisuke
PA Lion Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11012142	A2	19990119	JP 1997-179000	19970619

AB The **dentifrices**, useful for preventing or treating gingival inflammation, contain antiplasmins, ascorbic acid and/or its derivs., and optionally bactericides. A **dentifrice** contg. tranexamic acid, ascorbic acid Mg 2-phosphate, triclosan, and other ingredients was prepd. The **dentifrice** was used by healthy male volunteers to significantly improved gingival index.

❑ **Dentifrice** compositions containing microbicides, surfactants, and alkali carbonates for bad breath control

L13 ANSWER 11 OF 38 HCA COPYRIGHT 2000 ACS
AN 129:140492 HCA
IN Sase, Ayumi; Horiuchi, Teruo
PA Lion Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10212220	A2	19980811	JP 1997-31330	19970130

AB Title compns., which show long-lasting bad breath-controlling effect, contain microbicides, nonionic and/or amphoteric surfactants, and alkali metal bicarbonates and/or carbonates. A **mouthwash** was prepd. from NaHCO3 2.00, benzethonium chloride 0.01, polyoxyethylene cetyl ether 2.00, Na saccharin 0.01, perfume 0.50, EtOH 10, glycerin 5, and H2O to 100 wt.%.

❑ **Oral** compositions for **oral** disease and halitosis control

L13 ANSWER 12 OF 38 HCA COPYRIGHT 2000 ACS
AN 129:140488 HCA
IN Sayama, Yoshikatsu; Sugiyama, Shinji; Matsuda, Hidetaka; Fukuda, Kiyoshi
PA Nippon Zettoc Co., Ltd., Japan; Chugai Pharmaceutical Co., Ltd.; Taiyo Koryo K. K.
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 10194943	A2	19980728	JP 1997-1653	19970108

AB **Oral** compns. [e.g. **dentifrices**] for **oral** disease and halitosis control contain [a] Quercus salicina exts., [b] exts. of medicinal plants such as Acanthopanax senticocuus and rehmannia, [c] asarum root exts. and/or **hinokitiol**.

❑ Lubricating oils used in **dental** clinic tools

L13 ANSWER 13 OF 38 HCA COPYRIGHT 2000 ACS
AN 127:192833 HCA
IN Sakauchi, Mika; Ono, Kazuhiro; Osada, Takashi
PA Showa Pharmaceutical Chemical Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09188892	A2	19970722	JP 1996-293628	19961106
PRAI JP 1995-287055		19951106		

AB The lubricating oils are prepd. by blending a base oil such as (iso)paraffinic oil or polybutene with a flow-index improver contg. higher fatty acids, higher monovalent alcs., arom. alcs., or polyalkylene glycols, an oil-sol. disinfectant (e.g., **.beta.-thujaplicin**), and/or a Disinfecting plant oil such as Eucalyptus oil or Jojoba oil.

❑ **Hinokitiol** compositions and stabilization of them by adjusting pH with organic acids

L13 ANSWER 14 OF 38 HCA COPYRIGHT 2000 ACS
AN 127:140193 HCA
IN Okajima, Takako; Imamura, Koji; Suzuki, Kenichi; Urushizaki, Fumio
PA Taisho Pharmaceutical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09188620	A2	19970722	JP 1996-264	19960105

AB Compns. contg. **hinokitiol** (I), useful as a microbicide for hair and **dental** prepns., is adjusted to pH 5.0-6.0 with org. acids for stabilization. The compns. addnl. contg. minoxidil are also claimed. A compn. contg. I, glycyrrhetinic acid, pantothenyl Et ether, glycerin, propylene glycol, and EtOH was adjusted to pH 5.5 with NaOH and citric acid to give a hair growth lotion.

❑ Manufacture of pressure-sensitive drug capsules by cooling method for cosmetics

L13 ANSWER 15 OF 38 HCA COPYRIGHT 2000 ACS
AN 126:122293 HCA
IN Shirasawa, Takeshi; Mino, Seiya
PA Kao Corp, Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08325117	A2	19961210	JP 1995-134987	19950601

AB Drug capsules, from which active ingredients are easily released by brushing, etc., are manufd. by mixing drug particles with water-insol. encapsulating materials dissolved in org. solvents, cooling, and removing the solvents. The solvents can be recycled. The capsules are useful for **dentifrices**, shampoos, etc. Ascorbic acid granules were treated with EtOH soln. of paraffin wax, cooled, and filtered to give pressure-sensitive microcapsules.

❑ Preparation of **hinokitiol** and its intermediates

L13 ANSWER 16 OF 38 HCA COPYRIGHT 2000 ACS
AN 124:317530 HCA
IN Morita, Yasuhiro; Ninoi, Takeshi; Kubota, Minoru
PA Osaka Juki Kagaku Kogyo Kk, Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08040971	A2	19960213	JP 1994-197634	19940729
JP 2838656	B2	19981216		

AB **Hinokitiol** (I), useful for perfumes, cosmetics, **dentifrices**, and hair growth stimulants, was prepd. by redn. of 6,6-dimethylfulvene (II) with dialkylaluminum hydrides, cycloaddn. of dihaloketenes to the resulting 1-isopropylcyclopentadiene (III) which is selectively formed as the main product by the previous step, and rearrangement of the resulting adducts with solvents. Thus, a hexane soln. of AlH(CH2CHMe2)2 was added dropwise to a mixt. of II and hexane at 0.degree. and the reaction mixt. was further stirred at 0.degree. for 2 h then at .ltoreq.10.degree. for 30 h. The redn. reaction mixt. was added dropwise to an aq. HCl soln. at .ltoreq.10.degree. and the reaction mixt. was stirred at .ltoreq.10.degree. for 1 h to give 99.0% III with 1-/2-isomer ratio 14.8, vs. 0.91 for a control by redn. of II with LiAlH4. A hexane soln. of Et3N was added dropwise to a mixt. of III and Cl2CHCOCl at 0.degree. and the reaction mixt. was maintained at 0.degree. for 2 h to give a regioisomeric mixt. of the dimethylfulvene-ketene adduct. The adduct was dissolved in acetone-AcOH-Et3N-H2O mixt. and the soln. was refluxed for 10 h to give 28.0% (based on II) I.

❑ **Dentifrice** compositions containing sodium chloride, sodium bicarbonate, and bactericides

L13 ANSWER 17 OF 38 HCA COPYRIGHT 2000 ACS
AN 124:66247 HCA
IN Nakai, Ryozo; Maeda, Akitsugu; Yoshida, Hidenori; Eguchi, Yasuteru
PA Kao Corp, Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07258050	A2	19951009	JP 1994-49457	19940318

AB **Dentifrice** compns., such as **toothpastes** and prepns. for gum, contain NaCl, NaHCO3, bactericides, and optional water-insol. abrasives, oil components, or water-sol. polymers. The compns. have periodontium disease-controlling effect, moderate saltiness, high bactericidal effect, and good taste and feeling. A **toothpaste** was prepd. from NaCl 15.0, NaHCO3 15.0, sorbitol 14.0, glycerin 8.0, Na CM-cellulose 1.5, Na lauryl sulfate 2.0, Na saccharin 0.1, Al(OH)3 40.0, benzethonium chloride 0.01, perfume 0.8, and H2O to 100 wt.%.

❑ **Dentifrice** compositions containing enzymes and antifungal agents

L13 ANSWER 18 OF 38 HCA COPYRIGHT 2000 ACS
AN 123:237578 HCA
IN Sugano, Hideaki; Yamagishi, Keiichi; Ito, Satoshi; Tokumitsu, Fumihiko
PA Lion Corp, Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 07187977	A2	19950725	JP 1993-348110	19931224

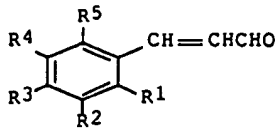
OS MARPAT 123:237578
AB **Dentifrice** compns. contain enzymes as active ingredients and antifungal agents chosen from RCHO, RCH(OR1)OR2 [R = C1-5 alkyl, alkenyl; R1, R2 = C1-3 alkyl, C2-3 alkenyl; R1R2 may form CH2CHMe, HOCH2CHCH2, CH2CH(OH)CH2], and **hinokitiol**. The antifungal agents also stabilize the enzymes (e.g. dextranase). A stable liq. **dentifrice** was formulated contg. dextranase and tert-2-hexenal.

❑ Liquid **dentifrice** compositions with low ethanol content

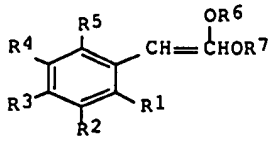
L13 ANSWER 19 OF 38 HCA COPYRIGHT 2000 ACS
AN 123:237576 HCA
IN Sugano, Hideaki; Yamagishi, Keiichi; Ito, Satoshi; Tokumitsu, Fumihiko
PA Lion Corp, Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07187973	A2	19950725	JP 1993-348109	19931224

OS MARPAT 123:237576
GI



I



II

AB Liq. **dentifrices** contain .ltoreq.3 wt.% EtOH and antifungal agents chosen from cinnamaldehydes I (R1-R5 = C1-3 alkyl, C2-3 alkenyl, H, OH, MeO, EtO; the adjacent 2 groups may form OCH2O; not all of R1-R5 = H), their acetals II [R1-R5 = C1-3 alkyl, C2-3 alkenyl, H, OH, MeO, EtO; the adjacent 2 groups may form OCH2O; R6, R7 = C1-3 alkyl, C2-3 alkenyl; R6R7 may form CH2CHMe, HOCH2CHCH2, CH2CH(OH)CH2], R8CHO (R8 = C5 alkyl, alkenyl), R8C(OR6)OR7 (R6-R8 = same as above), and **hinokitiol**. EtOH-free **mouthwash** contg. 0.002% p-methoxycinnamaldehyde showed good antifungal activity.

❑ Gargles containing **hinokitiol**

L13 ANSWER 20 OF 38 HCA COPYRIGHT 2000 ACS
AN 123:92950 HCA
IN Watanabe, Tatsuji
PA Nihei Mitsuyoshi, Japan; Watanabe Tatsuji
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07133214	A2	19950523	JP 1993-247580	19930908

AB Gargles, useful for control of methicillin-resistant Staphylococcus aureus (MRSA), resistant Mycobacterium tuberculosis, etc., contain **hinokitiol** (I) as the main ingredient. I inhibited MRSA MTS48001 with min. inhibitory concn. of 50 .mu.g/mL.

❑ **Dentifrice** compositions containing **hinokitiol** and/or guaiazulene and inorganic salts

L13 ANSWER 21 OF 38 HCA COPYRIGHT 2000 ACS
AN 117:157451 HCA
IN Hirai, Taichiro; Ida, Ikufumi; Matsuda, Hidetaka
PA Nippon Zettoc Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04198121	A2	19920717	JP 1990-327112	19901128
	JP 3036829	B2	20000424		

AB **Dentifrice** compns., which are packaged in containers having inner walls of synthetic polymers, contain **hinokitiol** and/or guaiazulene and H2O-sol. inorg. salts. The salts inhibit absorption of **hinokitiol** and guaiazulene by the polymer walls. NaCl 10, Ca hydrogen phosphate 35, Na lauryl sulfate 1.50, CNC Na 1.20, glycerin 20.00, Na saccharinate 0.10, alkyldiaminoethylglycine hydrochloride 0.10, **hinokitiol** 0.05, flavor 1.00, and H2O 31.05% were mixed, charged into container having polyethylene inner wall, and stored at 50.degree. for 1 mo to show 99.8% residual **hinokitiol**, vs. 50.2%, without NaCl.

❑ **Dentifrices** containing Pharmaceutical granules

L13 ANSWER 22 OF 38 HCA COPYRIGHT 2000 ACS
AN 116:136046 HCA
IN Maeda, Akitsugu
PA Kao Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03271215	A2	19911203	JP 1990-71154	19900320
	JP 2857789	B2	19990217		

AB Granules with particle size 50-500 .mu.m, which contain water-insol. inorg. binders and pharmaceuticals for **oral** diseases, are prepd. which disintegrate by the load of 0.1-10 g per particle. The granules enter interdental space and periodontal pocket and pharmaceutically effective components act there to prevent **dental** caries and periodontal diseases. An aq. slurry (H2O content 60%) contg. synthetic Al silicate 89, colloidal silica 10, and .beta.-glycyrrhetinic acid (I) 1 parts was spray-granulated to give granules (dism. 50-500 .mu.m) and disintegration strength 4.15 g/particle. A **dentifrice** contained the granules 15.0, glycerin 10.0, sorbitol soln. 30.0, CM-cellulose Na 2.0, saccharin Na 0.1, methylparaben 0.1, flavor 0.8 wt.%, and H2O balance.

❑ **Mouthwashes** containing sodium bicarbonate, tartaric acid and/or citric acid

L13 ANSWER 23 OF 38 HCA COPYRIGHT 2000 ACS
AN 116:113361 HCA
IN Tejima, Hiroshi
PA Shiseido Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03279321	A2	19911210	JP 1990-79659	19900328

AB These compns. are prepd. in the form of powder, conveniently carried and useful in cleansing the **mouth**. Thus, a formulation consisted of NaHCO3 7, CMC-coated tartaric acid 7, **hinokitiol** 0.003, cetylpyridinium chloride 0.003, l-menthol 0.3 and fragrance powder 0.5g.

❑ **Oral** bactericidal compositions containing quaternary ammonium salts and **hinokitiol**

L13 ANSWER 24 OF 38 HCA COPYRIGHT 2000 ACS
AN 116:46323 HCA
IN Nagahata, Tetsuji
PA Lion Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03151317	A2	19910627	JP 1989-288152	19891106

AB **Oral** bactericidal compns. (e.g. gargles, **dentifrices**, troches), useful for prevention and treatment of periodontosis, etc., contain quaternary ammonium salts, **hinokitiol** (I), and optional tri-Na citrate (II). The compns. show synergistic bactericidal effect in the saliva. Human saliva contg. 0.02 wt.% benzethonium chloride (III) and 0.1 wt.% **hinokitiol** was spread on agar media contg. Escherichia coli and left at 37.degree. for 1 night to show 8.5 .times. 105 bacterial cells, vs. 3.3 .times. 109 cells for control contg. III alone. III 0.02, I 0.1, II 1.0, polyoxyethylene hydrogenated castor oil 2.0, glycerin 10.0, EtOH 10.0, Na saccharin 0.01, flavor 0.4, and H2O to 100 wt.% were mixed to give a gargle.

❑ Anticaries **dentifrices** containing antibodies to Streptococcus mutans and bactericides

L13 ANSWER 25 OF 38 HCA COPYRIGHT 2000 ACS
AN 116:11040 HCA
IN Ota, Masakatsu; Horikoshi, Toshio; Hiraoka, Junichiro
PA Kanebo, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03115213	A2	19910516	JP 1989-252919	19890928

AB An anticaries **dentifrice** contains (1) an antibody to S. mutans and (2) .gtoreq.1 compd. selected from the group comprising F compds., chlorhexidines, bacteriocin, glucosyl transferase inhibitors, proteinase, bacteriolytic enzymes, and tropolones. Thus, antibodies to S. mutans were prepd. by injecting the S. mutans antigen to chickens, and isolating the antibodies from the eggs produced by the chickens. A **toothpaste** contg. the antibody 0.5 and NaF 0.1% by wt. was prepd.

❑ **Dentifrices** containing **hinokitiol**, edetates, and amphoteric surfactants

L13 ANSWER 28 OF 38 HCA COPYRIGHT 2000 ACS
AN 111:140244 HCA
IN Sugiyama, Shinji; Matsuda, Hidetaka; Onishi, Shigeki
PA Nippon Zeola K. K., Japan; Kanebo, Ltd.
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63211218	A2	19880902	JP 1987-44867	19870227
	JP 2586896	B2	19970305		

AB A **dentifrice** contains **hinokitiol**, edetic acid (or its salt), and a carboxylic acid-type amphoteric surfactant (a betaine or imidazoline deriv.). The **dentifrice** is stable in storage. Thus, a **toothpaste** was prepd. contg. 2-undecyl-hydroxyethytlimidazoline betaine 5.0, disodium edetate 0.5, and **hinokitiol** 0.1% by wt.

❑ **Dentifrices** containing **hinokitiol**, chlorhexidines, and carboxylic acid-type amphoteric surfactants

L13 ANSWER 29 OF 38 HCA COPYRIGHT 2000 ACS
AN 111:140243 HCA
IN Sugiyama, Shinji; Matsuda, Hidetaka; Onishi, Shigeki
PA Nippon Zeola K. K., Japan; Kanebo, Ltd.
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63211217	A2	19880902	JP 1987-44866	19870227
	JP 2586895	B2	19970305		

AB A **dentifrice** contains **hinokitiol**, chlorhexidines, and carboxylic acid-type amphoteric surfactants. The surfactants are betaine or imidazoline derivs. The **dentifrice** has a strong microbicidal activity. Thus, a **toothpaste** was prepd. consisting of **hinokitiol** 0.05, chlorhexidine gluconate 0.02, 2-undecyl-hydroxyethylimidazolinebetaine 3.0 CaHPO4 42.0, glycerin 20.0, CM cellulose Na 1.0, Na lauryl sulfate 1.0, saccharin Na 0.05, a flavor 0.5, and H2O to 100% by wt.

❑ **Dentifrices** containing **hinokitiol** and sterins for control of gingivitis

L13 ANSWER 30 OF 38 HCA COPYRIGHT 2000 ACS
AN 111:102562 HCA
IN Sasaki, Izumi; Tamura, Uhei
PA Shiseido Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63188619	A2	19880804	JP 1987-19409	19870129

AB A **dentifrice** contains .gtoreq.1 compd. selected from the group consisting of **hinokitiol** and sterins (dihydrocholesterin or epidihydrocholesterin), which controls gingivitis. Thus, a **toothpaste** was prepd. consisting of glycerin 10, CaCO3 40, CM cellulase 2, Na lauryl sulfate 1.5, saccharin Na 0.2, a flavor 1, **hinokitiol** 0.1, epidihydrocholesterin 0.01, and H2O to 100% by wt.

❑ **Dentifrices** containing monoterpenes for removing tobacco stains from **teeth**

L13 ANSWER 32 OF 38 HCA COPYRIGHT 2000 ACS
AN 107:204969 HCA
IN Inoue, Akira; Naganuma, Takeshi; Hozumi, Shimako
PA Lion Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62181212	A2	19870808	JP 1986-24642	19860205
	JP 08005772	B4	19960124		

AB **Toothpastes**, **mouthwashes**, and chewing gum contain .gtoreq.1 monoterpene selected from the group consisting of diosphenol, phellandral, carvomenthone, thymoquinone, chrysanthenone, cryptone, thujone, fenchone, picrocrocin, santenone, .alpha.-ionone, .beta.-ionone, .alpha.-irone, **hinokitiol**, .alpha.-thujaplicin, .gamma.-thujapliicn, artemisia ketone, and citral. The preferable concn. of the monoterpene is 0.01-10.0% by wt. These terpenes are esp. effective in removing tobacco stains from **teeth**. Thus, a **toothpaste** was prepd. consisting of CaHPO4.cntdot.2H2O 45.0, 85% glycerin 10.0, 60% sorbitol 25.0, CM-cellulose Na 0.5, preservative trace, and H2O to 100% by wt.

❑ **Dentifrices** containing ubiquinone-10 and pharmaeuticals for the prevention of **dental** diseases

L13 ANSWER 33 OF 38 HCA COPYRIGHT 2000 ACS
AN 106:143824 HCA
IN Takasu, Emiko; Koshiba, Kiyoko; Morikawa, Fujio; Nakajima, Keisuke; Furuse, Kazumaro
PA Shiseido Co., Ltd., Japan; Eisai Co., Ltd.
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61286314	A2	19861216	JP 1985-126431	19850611

AB **Dentifrices** contain ubiquinone-10 and pharmaceuticals such as **hinokitiol**, glycyrrhizin, vitamin E, vitamin B6, lysozyme chloride, etc. These are effective in preventing and treating **dental** diseases. Thus, a **toothpaste** consisted of CaHPO4.cntdot.2H2O 45, anhyd. SiO2 2, glycerin 10, sorbitol 10, CM cellulose 1, Irish moss 0.3, Na lauryl sulfate 1.8, H2O 28.6, a flavor 1.0, ubiquinone-10 0.2, vitamin B6 0.1% by wt. and a sweetener q.s.

❑ Gelatin-encapsulated **toothpaste**

L13 ANSWER 34 OF 38 HCA COPYRIGHT 2000 ACS
AN 105:102367 HCA
IN Yamashita, Shigeki; Marukawa, Shigeo
PA Shiseido Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 3 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 61100516	A2	19860519	JP 1984-219789	19841019

AB A **toothpaste** contg. a foaming agent 0.5-2.0, a moisturizing agent 10.0-70.0, an abrasive 10.0-40.0, and H2O 1.0-20.0% by wt. as major ingredients is encapsulated with gelatin. One capsule contains 0.3-0.5 g **toothpaste**, an amt. sufficient for 1 time use. It is conveniently used in schools and work places. Thus, a **toothpaste** consists of polyethylene glycol 68.0, CaCO3 20.8, anhyd. SiO2 0.2, Na lauryl sulfate 1.5, H2O 7.5, a flavor 1.5, saccharin Na 0.2% by wt., **hinokitiol** q.s., and Japan Blue No. 1 q.s.

❑ **Oral** preparations for adhesion to mucous membrane and **tooth** surface

L13 ANSWER 35 OF 38 HCA COPYRIGHT 2000 ACS
AN 103:220810 HCA
PA Nitto Electric Industrial Co., Ltd., Japan; Sunstar, Inc.
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 60116631	A2	19850624	JP 1983-226492	19831129

AB **Oral** prepns. for adhesion to the mucous membrane and **tooth** surface for prolonged release of active ingredients consist of: (1) a drug layer contg. topically active ingredients, .gtoreq.1 of acrylic acid polymers, acrylic acid copolymers or their salts, Na CM-cellulose [9004-32-4], Na alginate [9005-38-3] and hydroxyethyl cellulose [9004-62-0] and glycerol [56-81-5] and(or) propylene glycol [57-55-6], and a support layer contg. .gtoreq.1 of acrylic acid polymers, acrylic acid copolymers or their salts, Na CM-cellulose and hydroxyethyl cellulose and glycerol and(or) propylene glycol. Thus, poly(acrylic acid) [9003-01-4] 2, hydroxyethyl cellulose 3, propylene glycol 45, H2O 50 and Acrinol [1837-57-6] 0.1 g were mixed, spread on a polyester film and dried to form a 200-.mu.m thick layer. Sep., carboxyvinyl polymer [9003-01-4] 1, Na CM-cellulose 4, propylene glycol 45, CaCl2 0.3 and H2O 50 were mixed, spread on a polyester film and dried to form a 100-.mu.m thick layer. Both layers were sepd. from films, and laminated to produce an **oral** prepn.

❑ **Toothpastes** containing color indicators for timing adequate brushing

L13 ANSWER 36 OF 38 HCA COPYRIGHT 2000 ACS
AN 102:172447 HCA
PA Lion Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60016913	A2	19850128	JP 1983-122531	19830706
	JP 61058444	B4	19861211		

AB **Toothpastes** contain dye-polymer gel particles coated with inorg. substances. The particles are degraded during **tooth** brushing, and the color changes in approx. 2-2.5 min, a sufficient time for **tooth** brushing. Thus, 1 g yellow iron oxide was added to 1 g 3% Na alginate [9005-38-3] soln., and this mixt. was pulverized and then mixed with 3 g of TiO2 to obtain TiO2-coated particles (diam. 10-200 .mu.). A **toothpaste** was prepd. contg. 1% of this powder.

❑ **Dentifrices**

L13 ANSWER 37 OF 38 HCA COPYRIGHT 2000 ACS
AN 89:204248 HCA
IN Tokumaru, Teruto
PA Sunstar, Inc., Japan
SO Japan. Kokai, 4 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 53099339	A2	19780830	JP 1977-13758	19770209
	JP 58027772	B4	19830611		

AB Fluoride **dentifrices** comprise azulene [275-51-4] (a antiinflammatory, tissue regeneration-promoting, antiallergic agent) with **Hinokitiol** [**499-44-5**] and .gamma.-oryzanol [11042-64-1] added as stabilizer. Thus, a **dentifrice** contained anhyd. silicic acid 30, glycerol 20, sorbitol 30, Na CM-cellulose 0.5, Na lauryl sulfate 1.5, Bu p-hydroxybenzoate 0.03, tin fluoride 0.4, H2O-sol. azulene, Na saccharin 0.13, H2O 17.21, and .gamma.-oryzanol 0.2%.

❑ Cyanoacrylate containing phenol derivatives for **dental** use

L13 ANSWER 38 OF 38 HCA COPYRIGHT 2000 ACS
AN 79:9909 HCA
IN Yano, Gunji
PA Neo Seiyaku Kogyo Co., Ltd.
SO Japan. Kokai, 2 pp.
CODEN: JKXXAF
DT **Patent**
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 47043218	B4	19721219	JP 1971-30422	19710510

AB A **dental** palliative soln. contains cyanoacrylate and o-methoxyphenol, its derivs., or **hinokitiol** (1-20%) and should be kept in cool and dark place.

❑ **Oral** hygiene composition containing encapsulated **hinokitiol** NoAbstract.

L18 ANSWER 1 OF 16 WPINDEX COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1999-325505 [27] WPINDEX
DC D21 E15
IN HONG, J U; KIM, D H; LEE, S R; SUH, G H
PA (PACI-N) PACIFIC CORP
CYC 1
PI KR 98025553 A 19980715 (199927)*
ADT KR 98025553 A KR 1996-43716 19961002
PRAI KR 1996-43716 19961002
**** DATA NOT AVAILABLE FOR THIS ACCESSION NUMBER

❑ Oral bactericidal compositions containing quaternary ammonium salts and hinokitiol

L17 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1992:46323 CAPLUS
DOCUMENT NUMBER: 116:46323

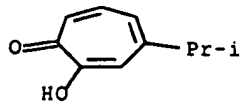
INVENTOR(S): Nagahata, Tetsuji
PATENT ASSIGNEE(S): Lion Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: **Patent**
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03151317	A2	19910627	JP 1989-288152	19891106

AB Oral bactericidal compns. (e.g. gargles, dentifrices, troches), useful for prevention and treatment of periodontosis, etc., contain quaternary ammonium salts, hinokitiol (I), and optional tri-Na citrate (II). The compns. show synergistic bactericidal effect in the saliva. Human saliva contg. 0.02 wt.% benzethonium chloride (III) and 0.1 wt.% hinokitiol was spread on agar media contg. Escherichia coli and left at 37.degree. for 1 night to show 8.5 .times. 105 bacterial cells, vs. 3.3 .times. 109 cells for control contg. III alone. III 0.02, I 0.1, II 1.0, polyoxyethylene hydrogenated castor oil 2.0, glycerin 10.0, EtOH 10.0, Na saccharin 0.01, flavor 0.4, and H2O to 100 wt.% were mixed to give a gargle.

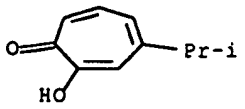
IT **499-44-5D**, Hinokitiol, mixts. contg. quaternary ammonium salts **138317-14-3 138317-15-4**
RL: BIOL (Biological study)
(oral bactericides contg., synergistic)

RN 499-44-5 CAPLUS
CN 2,4,6-Cycloheptatrien-1-one, 2-hydroxy-4-(1-methylethyl)- (9CI) (CA INDEX NAME)

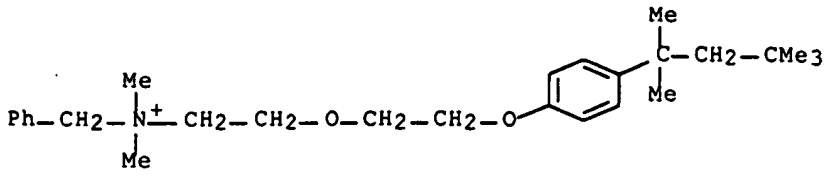


RN 138317-14-3 CAPLUS
CN Benzenemethanaminium, N,N-dimethyl-N-[2-[2-[4-(1,1,3,3-tetramethylbutyl)phenoxy]ethoxy]ethyl]-, chloride, mixt. with 2-hydroxy-4-(1-methylethyl)-2,4,6-cycloheptatrien-1-one (9CI) (CA INDEX NAME)

CM 1
CRN 499-44-5
CMF C10 H12 O2



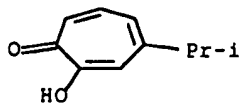
CM 2
CRN 121-54-0
CMF C27 H42 N O2 . Cl



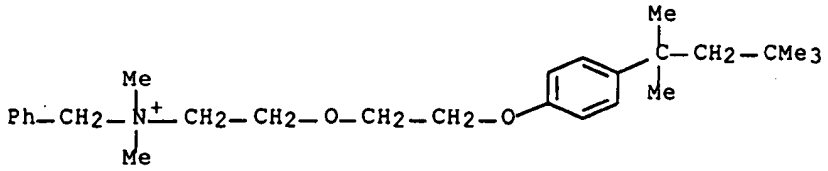
RN 138317-15-4 CAPLUS
CN Benzenemethanaminium, N,N-dimethyl-N-[2-[2-[4-(1,1,3,3-tetramethylbutyl)phenoxy]ethoxy]ethyl]-, chloride, mixt. with 2-hydroxy-4-(1-methylethyl)-2,4,6-cycloheptatrien-1-one and 2-hydroxy-1,2,3-propanetricarboxylic acid trisodium salt (9CI) (CA INDEX NAME)

CM 1

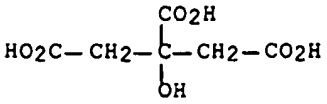
CRN 499-44-5
CMF C10 H12 O2



CM 2
CRN 121-54-0
CMF C27 H42 N O2 . Cl



CM 3
CRN 68-04-2
CMF C6 H8 O7 . 3 Na



******END OF RECORD ********

❑ Toothpastes containing color indicators for timing adequate brushing

L17 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1985:172447 CAPLUS
DOCUMENT NUMBER: 102:172447

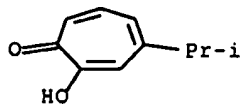
PATENT ASSIGNEE(S): Lion Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: **Patent**
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60016913	A2	19850128	JP 1983-122531	19830706
JP 61058444	B4	19861211		

AB Toothpastes contain dye-polymer gel particles coated with inorg. substances. The particles are degraded during tooth brushing, and the color changes in approx. 2-2.5 min, a sufficient time for tooth brushing. Thus, 1 g yellow iron oxide was added to 1 g 3% Na alginate [9005-38-3] soln., and this mixt. was pulverized and then mixed with 3 g of TiO2 to obtain TiO2-coated particles (diam. 10-200 .mu.). A toothpaste was prepd. contg. 1% of this powder.

IT **499-44-5D**, iron complexes
RL: BIOL (Biological study)
(particles contg. polymers and, for toothpaste time of brushing indicator)

RN 499-44-5 CAPLUS
CN 2,4,6-Cycloheptatrien-1-one, 2-hydroxy-4-(1-methylethyl)- (9CI) (CA INDEX NAME)



*** END OF RECORD ***

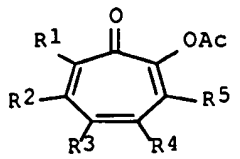
Preparation of sulfonyloxytropones

L24 ANSWER 89 OF 94 MARPAT COPYRIGHT 2000 ACS
ACCESSION NUMBER: 130:223073 MARPAT

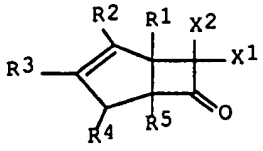
INVENTOR(S): Takuma, Yuki; Okamoto, Ken; Mizuho, Yuji; Murakami, Takeshi
PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11060550	A2	19990302	JP 1997-229209	19970826

OTHER SOURCE(S): CASREACT 130:223073
GI



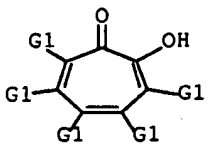
I



II

AB Title compds. I [A = SO2R6; R1-R5 = H, halo, (un)substituted aliph. or arom. hydrocarbon, etc.; R6 = (un)substituted aliph. or arom. hydrocarbon] are prepd. by reaction of II (R1-R5 = same as I; X1, X2 = halo) with bases in solvents, extn. of tropones I (A = H, R1-R5 = same as I) (III) with org. solvents, removal of acid components, sulfonylation without isolation of III. 7,7-Dichlorobicyclo[3.2.0]hept-2-en-6-one was treated with NaOH in AcOH under reflux for 10 h and extd. to give a PhMe soln. contg. tropone (94.2% yield), which was washed with satd. NaCl aq. soln. 4 times and sulfonylated with p-MeC6H4SO2Cl in THF in the presence of Et3N at 20-30.degree. for 5 h to give 73% 2-(p-toluenesulfonyloxy)tropone.

MSTR 2



G1 = H / X / Ak (SO) / Cb<AR (0)> (SO) / aryl (SO) / (EX loweralkyl (SO) / Ph / **Pr-i**)
MPL: claim 1
NTE: additional ring formation also claimed

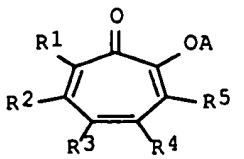
Preparation of sulfonyloxytropones

L24 ANSWER 90 OF 94 MARPAT COPYRIGHT 2000 ACS
ACCESSION NUMBER: 130:109977 MARPAT

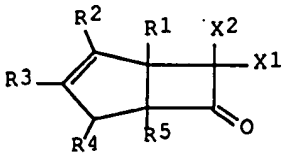
INVENTOR(S): Takuma, Yuki; Okamoto, Ken; Mizuho, Yuji; Murakami, Takeshi
PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11001465	A2	19990106	JP 1997-153419	19970611

OTHER SOURCE(S): CASREACT 130:109977
GI



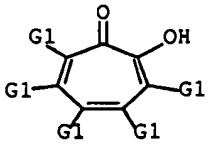
I



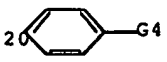
II

AB Title compds. I [A = OSO2R6; R1-R5 = H, halo, (substituted) aliph. or arom. hydrocarbon, etc.; R6 = (substituted) aliph. or arom. hydrocarbon] are prepd. by reaction of bicycloheptenones II (R1-R5 = same as above; X1, X2 = halo) with acid-binding agents in carboxylic acid solvents contg. carboxylates, extn. of tropones I (A = H; R1-R5 = same as above) (III) with org. solvents, and reaction of III with sulfonating agents without isomerization of III. 7,7-Dichlorobicyclo[3.2.0]hept-2-en-6-one was treated with NaOH in AcOH under reflux for 8 h and extd. with PhMe to give 93.4% tropone, which was treated with p-MeC6H4SO2Cl in the presence of Et3N at 20-30.degree. for 4 h to give 85.0% 2-(p-toluenesulfonyloxy)tropone with 99.3% purity.

MSTR 2



G1 = H / Cl / Br / alkyl<(1-5)> (SO (1-) G3) / aryl (SO (1-) G3) / (EX Ph / p-C6H4Me / **Pr-i**)
G3 = R / (EX CH2OMe / CF3 / 20 / X / alkoxy)



G4 = Cl / OEt
MPL: claim 1
NTE: substitution is restricted

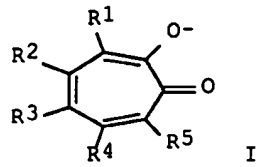
Preparation of aromatic carbonate esters

L24 ANSWER 92 OF 94 MARPAT COPYRIGHT 2000 ACS
ACCESSION NUMBER: 125:247400 MARPAT

INVENTOR(S): Ookago, Juji; Hayashi, Hideto; Myagi, Hidekazu; Kujira, Katsufumi; Takagi, Masatoshi; Suzuki, Naoki
PATENT ASSIGNEE(S): Mitsubishi Chem Corp, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08193056	A2	19960730	JP 1995-4382	19950113

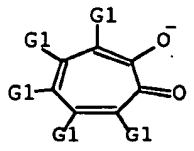
OTHER SOURCE(S): CASREACT 125:247400
GI



I

AB The title compds. are prepd. by treating arom. hydroxy compds. with CO and O in the presence of catalysts contg. (A) Pd and/or Pd compds., (B) Ce compds. and/or Co compds. binding with .gtoreq.1 of tropolonate aniones I (R1-5 = H, C1-20 alkyl), and (C) quaternary onium halides and/or alkali halides. Autoclaving a mixt. of PhOH, Pd/C, tetrakis(tropolonate)cerium, and CsCl at 100.degree., 6 MPa CO, and 3 MPa air for 3 h gave 20.4% (PhO)2CO.

MSTR 1



G1 = H / alkyl<(1-20)> / (SC Pr-i)
MPL: claim 1

negative bacteria such as E.coli, Pseudomonas aeruginosa and Staphylococcus aureus, including methicillin-resistant strains (MRSA). The agent is used to impregnate nonwoven cloth, for disinfecting the skin; in creams, emulsions, lotions, oils, cosmetics, packs, bath agents, agents to treat athlete's foot, hair growth agents, and moisturisers, for application to the skin; and in washing agents such as skin washing agents, rinses, shampoo agents for washing food or food vessels, agents for washing machinery vessels and **dentifrice** or **mouth** washes.

ADVANTAGE - The aluminium component stabilises the **hinokitiol** component against degradation from heat and light, so that products contg. the agent can be stored for longer.

Dwg.0/0

❑ Hydrophilising agent to facilitate cleaning of hard surfaces - contg. benzo cycloheptenones as hydrophilising agent.

L54 ANSWER 468 OF 499 WPINDEX COPYRIGHT 2000 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1995-340384 [44] WPINDEX
DOC. NO. CPI: C1995-150178

DERWENT CLASS: A60 D21 E13 E14 F06 G04
PATENT ASSIGNEE(S): (KAOS) KAO CORP
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
JP 07233397	A	19950905	(199544)*		7	C11D007-26

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 07233397	A	JP 1994-78666	19940418

PRIORITY APPLN. INFO: JP 1993-332341 19931227
INT. PATENT CLASSIF.:
MAIN: C11D007-26
SECONDARY: C09K003-00; D06M013-152
ADDITIONAL: C09K003-16; C09K003-18

BASIC ABSTRACT:

JP 07233397 A UPAB: 19951109

New hydrophilising agent contains a **benzotropolone**(s) of formula (1). R1 = H or OH; R2 and R3 = H, CH3, carboxyl or either of the gps. described on page 2; R4 = H or 3,4,5-trihydroxybenzoyl; R5 = H, OH or 3,4-trihydroxybenzyl.

Benzotropolones include theaflavin, thaflavin monogallate, theaflavin digallate, categallin, pyrogallin, erycetain and purpurogallin.

USE - Hydrophilisaton comprising contacting solid surfaces with the soln. contg. (1) is new. Applicable substrates include hard surfaces, such as glass, pottery and enamel, metals, such as aluminium, stainless steel and brass, plastics, such as polyethylene, polypropylene, and melamine resins, natural fibres, such as cotton, silk and wool, synthetic fibres, such as polyesters, nylons and rayons, hair and the **teeth**.

ADVANTAGE - The agent notably facilitates cleaning of surfaces of glass, metals, pottery, fibres and so on and prevents their re-soiling.

Dwg.0/0

❑ Prepn. of 2-chloro-5-isopropyl **tropone** - comprises reacting di chloro carbene and 1-alkoxy-4-isopropyl-1,4-cyclohexadiene, oxidising prod. and ring-expanding using acid catalyst.

L54 ANSWER 474 OF 499 WPINDEX COPYRIGHT 2000 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1991-291719 [40] WPINDEX
DOC. NO. CPI: C1991-126309

DERWENT CLASS: B05 C03 D21
PATENT ASSIGNEE(S): (TAKS) TAKASAGO PERFUMERY CO LTD
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
JP 03193743	A	19910823	(199140)*			
JP 07053681	B2	19950607	(199527)		6	C07C049-687

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 03193743	A	JP 1989-332961	19891225
JP 07053681	B2	JP 1989-332961	19891225

FILING DETAILS:

PATENT NO	KIND		PATENT NO
JP 07053681	B2	Based on	JP 03193743

PRIORITY APPLN. INFO: JP 1989-332961 19891225
INT. PATENT CLASSIF.: C07B061-00; C07C041-30; C07C043-18; C07C045-48; C07C049-41; C07D303-22
SECONDARY: C07B061-00; C07C041-30; C07C043-18; C07C045-48; C07C045-58; C07C049-41; C07D303-22

BASIC ABSTRACT:

JP 03193743 A UPAB: 19930928

Prepn. of 2-chloro-5-**isopropyltropone** of formula (IV) comprises: adding dichlorocarbene to 1-alkoxy-4-isopropyl-1,4-cyclohexadiene of formula (I) to give 1-alkoxy-4-isopropyl-7,7-dichlorobicyclo(4.1.0) hept-3-ene of formula (II), oxidising (II) to give 1-alkoxyl-4-isopropyl-3,4-epoxy -7,7-dichlorobicyclo(4.1.0)heptane of formula (III), and expanding the ring of (III) in the presence of acid catalyst to give (IV). R = 1-3C alkyl. (I) can be prepd. by esterification of 4-isopropylphenol and subsequent Birch reduction. Dichlorocarbene is prepd. in the CHCl3 - 50% NaOH - phase-transfer catalyst system. As an agent for epoxidation, AcOOH, aq. H2O2 -oxidising agent, etc. are used.

USE/ADVANTAGE - (IV) are useful intermediates for prepn. of 4- or 5-isopropyl-2-hydroxycyclohepta -2,4,6-triene-1-one and azulene derivs., which have cell activating, antibacterial, and antimycotic effect and they are blended to trichogen, **dentifrice**, cosmetics, etc. The process gives (IV) in high yield using a cheap starting material and suitable for mass-production.

0/0

- Essential oil and **tropolone**(s) prodn. - by cultivating callus formed on juniper sp..

L54 ANSWER 476 OF 499 WPINDEX COPYRIGHT 2000 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1990-072979 [10] WPINDEX
DOC. NO. NON-CPI: N1990-055821
DOC. NO. CPI: C1990-032317

DERWENT CLASS: C03 D16 D21 D23 E15 P13
PATENT ASSIGNEE(S): (TAKS) TAKASAGO PERFUMERY CO LTD
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
JP 02027991	A	19900130	(199010)*		8	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 02027991	A	JP 1988-176231	19880716

PRIORITY APPLN. INFO: JP 1988-176231 19880716
INT. PATENT CLASSIF.: A01H004-00; C11B009-00; C12N005-04; C12P007-26; C12R001-91

BASIC ABSTRACT:

JP 02027991 A UPAB: 19930928

Pieces of plant (Juniperus chinensis cv 'Kaizuka') are cultivated to induce a callus, and the obtd callus is propagated, and the essential oil and **tropolones** produced in it are harvested.

Pref in the cultivation and subcultivation, growth regulating naphthaleneacetic acid, indole acetic acid) or cytokinins (benzyladenine, kinetin, 2-isopentenyladenine, 6-benzyladenine) are used.

USE/ADVANTAGE - Essential oil is useful as a component of cosmetic, perfume, soap and other aromatic substances. **Tropolones** (**hinokitiol**) are widely used as a component for **tooth** paste, hair tonic or cloth insecticide. Industrial mass-prodn of essential oil and **tropolones** (**hinokitiol**, nutokatin), is provided without influence of natural circumstances. Process may be conducted in a completely controlled environment with ease and the yield is high.

0/0

❑ Sodium **hinokitiol** extn from essential oils - by dilution with organic solvent, treatment with caustic soda soln, and cooling to ppte.

L54 ANSWER 490 OF 499 WPINDEX COPYRIGHT 2000 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1976-27205X [15] WPINDEX

DERWENT CLASS: B04
PATENT ASSIGNEE(S): (KAFU-I) KAFUKU A
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
JP 51023244	A	19760224	(197615)*			

PRIORITY APPLN. INFO: JP 1974-94749 19740819
INT. PATENT CLASSIF.: C07C049-56
BASIC ABSTRACT:
JP 51023244 A UPAB: 19930901
A process is described for extracting and sepg. sodium **hinokitiol** from **hinokitiol**-contg. essential oils such as those obtd. from Quercus **dentata**, Chamaecyparis formosensis, Thujopsis dolabrata var. Hondai, T. standishii Carr., etc. The oil is diluted 8-10 fold with an organic solvent (pref. benzene). To the resulting diluted liq. is added 3N caustic soda followed by shaking, and the sepd. alkali layer is allowed to stand under freezing to precipitate the desired cpd. Sepn. of the oily layer and aq. layer is easy. The desired cpd. can be obtd. in high yield.

❑ Cyanoacrylate-contng phenol derivs - for **dental** use.

L54 ANSWER 496 OF 499 WPINDEX COPYRIGHT 2000 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1973-56956U [39] WPINDEX

DERWENT CLASS: A96 B05 D21
PATENT ASSIGNEE(S): (NEO-N) NEO SEIYAKU KOGYO CO LTD
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
JP 47043218	A		(197339)*			

PRIORITY APPLN. INFO: JP 1971-30422 19710510
BASIC ABSTRACT:
JP 47043218 A UPAB: 19930831
A **dental** palliative soln. contains cyanoacrylate and o-methoxyphenol, its derivs., or **hinokitiol** (1-20%) and should be kept in cool and dark place.

- Wash compsn. for use in **dental** drugs, cosmetic creams, skin washes etc. - contains **hinokitiol** and metal soap composed of metal other than alkali metal.

L18 ANSWER 6 OF 16 WPINDEX COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1996-379456 [38] WPINDEX
DNC C1996-119831
DC B05 D21 E15
PA (PPFP-N) P & PF KK
CYC 1
PI JP 08183997 A 19960716 (199638)* 9p
ADT JP 08183997 A JP 1994-339603 19941227
PRAI JP 1994-339603 19941227
AN 1996-379456 [38] WPINDEX
AB JP 08183997 A UPAB: 19960924

Wash compsn. contains as its essential components, **hinokitiol** and a metal soap composed of a ~~metal other than alkali~~ metals.

USE/ADVANTAGE - **Hinokitiol** is useful as a microbicidal or antiseptic agent compounded in ~~dental drugs,~~ cosmetic cream, skin washes, etc. Compounding of metal soap in this **hinokitiol** -based wash compsn. improves photo-, heat or chemical stability of **hinokitiol** without affecting the foaming property, colour, etc. of the compsn.

Pref. ~~metal is~~ Al, Ca, Mg, Ba, Cu, Fe or Ag.

In an example, ethanol (10 wt.%) and mixt. of fatty acids (lauric acid 15, myristic acid 30, palmitic acid 10, stearic acid 25, and oleic acid 20 pts. wt.) were mixed in reactor at 50-70 deg.C. To this was added NaOH for neutralisation to obtain mixt. of sodium salts of fatty acids. Then, 45% of this mixt. was maintained at 65-80 deg.C. To this were added sorbitol 1-%, purified sugar 10%, glycerine 5%, and **hinokitiol** and metal soap powder (aluminium monostearate). Mixt. was added to ion-exchanged water to form the total 100%. Colloidal soap was poured into frame, cooled, solidified, cit, dried, and moulded to form a clear solid soap. This wash showed good photostability (3000 lux, 300 hrs.) and heat stability (37 deg.C, 30 days).

- Abrasive compsn. used in **dentifrice** - comprises porous coral powder of specified particle size and fine pore dia..

L18 ANSWER 9 OF 16 WPINDEX COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1991-048182 [07] WPINDEX
DNC C1991-020518
DC B07 D21
PA (HAZA) HAZAMA GUMI LTD
CYC 1
PI JP 03000789 A 19910107 (199107)* 2p
JP 2778987 B2 19980723 (199834) 2p
ADT JP 03000789 A JP 1989-136377 19890529; JP 2778987 B2 JP 1989-136377 19890529
FDT JP 2778987 B2 Previous Publ. JP 03000789
PRAI JP 1989-136377 19890529
AN 1991-048182 [07] WPINDEX
AB JP 03000789 A UPAB: 19930928
The compsn. comprises porous coral powder, pref. of particle size and fine pore dia. of 1-50 microns and 0.01-50 microns respectively.

USE/ADVANTAGE - The abrasive compsn. is used for **dentifrice**, and it not only has appropriate abrasive properties but is also excellent as a builder (surfactant) and adsorbent. The use of the abrasive compsn. enables removal of sediment on the **tooth** face without injuring **teeth**. When a flavouring agent and medical ingredients are added to it as additives, they are effectively retained and the action of the additives is effectively displayed, and additionally, any odour in the **mouth** can be adsorbed and removed.

In an example, the abrasive compsn. was incorporated in the following **dentifrice** compsn. comprising 20 wt.% porous coral powder (particle size: 1-10 microns), 0.1 wt.% **hinokitiol**, 0.5 wt.% sodium laurate, 10 wt.% sodium alginate, 0.1 wt.% spearmint oil and water (balance).
0/0

Pref. powder also contains Cu-ions and/or Zn-ions. Prepn. comprises (a) adding CaCl2 soln. to Na2HPO4 soln. and 1 or more Ag-salt, to form hydroxyapatite ppte. contg. Ag-ions; (b) collecting and washing ppte.; then (c) drying and crushing to form prod..

USE - As artificial bone, artificial root of **tooth**, **dentifrice**, **dental** cement, supplement for bone deficit, cosmetic material.

ABEQ DE 3932469 C UPAB: 19931116

Antimicrobial hydroxyapatite powder contg. 0.0001-5 wt.% Ag-, Cu- and/or Zn- ions adsorbed on it is claimed. The powder is prepd. by suspending hydroxyapatite in water, adding an Ag, Cu and/or Zn salt, (I) washing the ppte. with distilled water, drying and pulverising; or by adding CaCl2 soln. in drops to a soln. of Na2HPO4 and the (I) salt, and treating the ppte. as before.

An antimicrobial powder comprising (a) 0.01-10 wt.% **hinokitiol**, tannin, lysozyme, protamine and/or sorbic acid; and hydroxyapatite, with (a) adsorbed on the hydroxyapatite, is also claimed.

USE - The powder has high affinity for, and is used in the prodn. of, **dental** materials (**dental** cement, **tooth**-cleaning materials etc.), bone- repair materials, cosmetic agents etc., foodstuffs, packing materials, filler etc...

Dwg.0/0

ABEQ US 5268174 A UPAB: 19940203

Antimicrobial hydroxyapatite powder comprises hydroxyapatite powder having absorbed 0.01-10 wt.% of an antimicrobial agent selected from **hinokitiol**, protamine and sorbic acid.

USE/ADVANTAGE - These powders are widely used in the medical, **dental**, and hygienic fields as artificial bone, **dentifrice**, **dental** cement, supplement for bone deficit and cosmetic materials. The antimicrobial hydroxyapatites are stable and heat resistant as well as safe. The antimicrobial agents are widely used in the fields of drug, medical instruments, cosmetics, foods, kitchen wares, etc.

❑ Essential oil and tropolone(s) prodn. - by cultivating callus formed on juniper sp..

L18 ANSWER 11 OF 16 WPINDEX COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1990-072979 [10] WPINDEX
DNN N1990-055821 DNC C1990-032317
DC C03 D16 D21 D23 E15 P13
PA (TAKS) TAKASAGO PERFUMERY CO LTD
CYC 1
PI JP 02027991 A 19900130 (199010)* 8p
ADT JP 02027991 A JP 1988-176231 19880716
PRAI JP 1988-176231 19880716
AN 1990-072979 [10] WPINDEX
AB JP 02027991 A UPAB: 19930928

Pieces of plant (Juniperus chinensis cv 'Kaizuka') are cultivated to induce a callus, and the obtd callus is propagated, and the essential oil and tropolones produced in it are harvested.

Pref in the cultivation and subcultivation, growth regulating naphthaleneacetic acid, indole acetic acid) or cytokinins (benzyladenine, kinetin, 2-isopentenyladenine, 6-benzyladenine) are used.

USE/ADVANTAGE - Essential oil is useful as a component of cosmetic, perfume, soap and other aromatic substances. Tropolones (**hinokitiol**) are widely used as a component for **tooth** paste, hair tonic or cloth insecticide. Industrial mass-prodn of essential oil and tropolones (**hinokitiol**, nutokatin), is provided without influence of natural circumstances. Process may be conducted in a completely controlled environment with ease and the yield is high.

0/0

- Prepn. of **beta-thujaplicin**, used in hair ointment, etc. - by dehydro bromination of 3,7-di bromo-4-isopropyl -1,2-cycloheptane di one.

L18 ANSWER 12 OF 16 WPINDEX COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1988-046871 [07] WPINDEX
DNC C1988-020923
DC B05 D21 E15
PA (HINO-N) HINOKI SHINYAKU KK
CYC 1
PI JP 63005048 A 19880111 (198807)* 6p
JP 63044733 B 19880906 (198839)
ADT JP 63005048 A JP 1986-149260 19860625
PRAI JP 1986-149260 19860625
AN 1988-046871 [07] WPINDEX
AB JP 63005048 A UPAB: 19930923
Prepn. of **beta-thujaplicin** comprises (I) obtaining 4-ixopropyl-1,2- cycloheptadione of formula (8) by oxidn. of 3-isopropyl cycloheptanone of formula (7); (II) obtaining 3,7-dibromo-4-isopropyl -1,2-cycloheptanedione of formula (9) by bromination of 4-isopropyl-1,2 -cycloheptanedione of formula (8); and (III) obtaining **beta-thujaplicin** by dehydrobromination of 3,7-dibromo-4-isopropyl-1,2-cycloheptanedione of formula (9).
USE/ADVANTAGE - The cpd. can be easily obtd. in high yield using simple appts. and is useful for hair ointment, remedy for pyorrhoea alveolaris, **toothpaste**, basic cosmetic, etc.
In an example, crude 3,7-dibromo-4-isopropyl -1,2-cycloheptadione was dissolved in 4ml dimethylformamide, and 160mg anhydrous lithium carbonate and 160mg lithium chloride were added. The mixt. was stirred for 45 mins. at 120 deg.C to dehydrobrominate. After the reaction was completed, the reaction mixt. was diluted with ether, and the ether layer extd. with 5% aq. NaOH soln. The extd. aq. alkali soln. was acidified with HCl and extd. with dichloromethane. The dichloromethane layer was washed with water and satd. brine, and then the solvent was distilled off under reduced pressure. The residue was diluted with ether, and then washed with water and satd. brine. The solvent was distilled off under reduced pressure to obtain 80mg of crude **beta-thujaplicin**. The yield based on 3-isopropyl cycloheptanone was 61.0%.
0/0

- **Beta-thujaplicin** (**hinokitiol**) prepn. - by reacting 1-isopropyl-cyclopenta-1,3-diene with dihaloacetylchloride and then with acid.

L18 ANSWER 15 OF 16 WPINDEX COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1976-78714X [42] WPINDEX
DC B05 D21 E12
PA (OGAW-N) OGAWA KORYO KK
CYC 1
PI JP 51033901 B 19760922 (197642)*
PRAI JP 1970-121386 19701229
AN 1976-78714X [42] WPINDEX
AB JP 76033901 B UPAB: 19930901
beta-Thujaplicin is prepd. by reacting 1-isopropyl cyclopenta-1,3-diene with dihaloacetyl haloride to form 1-isopropyl-1,3-diene dihaloketene adduct, and treating the adduct with 1-3C lower carboxylic acid and alkali metal salt to form thujaplicin. **beta-Thujaplicin** is useful as an antibiotic, hair restorer and additive for **dental** cream, no gamma-thujaplicin is produced.